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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,818	02/28/2002	Koji Takahashi	829-585	1578

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EXAMINER

SONG, MATTHEW J

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

09/936,818

Applicant(s)

TAKAHASHI ET AL.

Examiner

Matthew J Song

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 25 February 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The reply was filed after the date of filing a Notice of Appeal, but prior to the date of filing an appeal brief. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 29-36, 38-70, 72-107 and 109-141.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
see continuation sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☐ Other: _____.

NADINE G. NORTON
SUPERVISORY PATENT EXAMINER

Continuation of 3. NOTE: Claim 29 has been amended to delete "adding or" from line 1. The deletion of an alternative has narrowed the claim, which would require further search and consideration

Continuation of 11.

Applicant's arguments filed 2/25/2005 have been fully considered but they are not persuasive.

Applicant's argument that one of ordinary skill in the art would not have used the MBE temperature of Tomomura in a MOVPE system of Adomi because the deposition techniques are unrelated is noted but is not found persuasive. The Examiner agrees with applicant that a person of ordinary skill in the art would not use a temperature for MBE process in a MOVPE process. However, the basis of the rejection is not using the MBE temperature in a MOVPE process. The basis of the rejection is using a MBE process at a MBE temperature. Adomi teaches a MOVPE process, as suggested by applicant, which is different from the MBE process taught by Tomomura. However, Adomi is not limited to a MOVPE process and Adomi suggests using a chemical beam epitaxial method (col 4, ln 35-46). Tomomura teaches an MBE process, which encompasses a chemical beam epitaxial method using a NH_3 source gas at 580°C . Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Adomi by using the MBE process taught by Tomomura at a temperature of 580°C . The combination of Adomi and Tomomura is not simply the process temperature, but also the MBE process.

Applicant's argument that there is no suggestion for using a temperature of $450\text{-}680^\circ\text{C}$ is noted but is not found persuasive. Tomomura et al teaches using a temperature of $500\text{-}750^\circ\text{C}$,

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which overlaps the claimed range and overlapping ranges are held to be obvious (MPEP 2144.05). Also, Tomomura et al specifically teaches using a temperature of 580°C, which is within the claimed range, when NH₃ is used a nitrogen source (col 5, ln 50-55 and col 7, ln 30-35). Furthermore, the showing of unexpected results cannot be supported with only the four data of Figure 4. There is no showing that the endpoints of the claimed ranges are critical, as suggested by applicant.